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Evolutionary precursors of social norms in chimpanzees: a new approach

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Abstract: Moral behaviour, based on social norms, is commonly regarded as a hallmark of humans. Hitherto, humans are perceived to be the only species possessing social norms and to engage in moral behaviour. There is anecdotal evidence suggesting their presence in chimpanzees, but systematic studies are lacking. Here, we examine the evolution of human social norms and their underlying psychological mechanisms. For this, we distinguish between conventions, cultural social norms and universal social norms. We aim at exploring whether chimpanzees possess evolutionary precursors of universal social norms seen in humans. Chimpanzees exhibit important preconditions for their presence and enforcement: tolerant societies, well-developed social-cognitive skills and empathetic competence. Here, we develop a theoretical framework for recognizing different functional levels of social norms and distinguish them from mere statistical behavioural regularities. Quasi social norms are found where animals behave functionally moral without having moral emotions. In proto social norms, moral emotions might be present but cannot be collectivized due to the absence of a uniquely human psychological trait, i.e. shared intentionality. Human social norms, whether they are universal or cultural, involve moral emotions and are collectivized. We will discuss behaviours in chimpanzees that represent potential evolutionary precursors of human universal social norms, with special focus on social interactions involving infants. We argue that chimpanzee infants occupy a special status within their communities and propose that tolerance towards them might represent a proto social norm. Finally, we discuss possible ways to test this theoretical framework.

DOI: <https://doi.org/10.1007/s10539-010-9240-4>

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ZORA URL: <https://doi.org/10.5167/uzh-42727>

Journal Article

Accepted Version

Originally published at:

Rudolf von Rohr, C; Burkart, J M; van Schaik, C P (2011). Evolutionary precursors of social norms in chimpanzees: a new approach. *Biology and Philosophy*, 26(1):1-30.

DOI: <https://doi.org/10.1007/s10539-010-9240-4>

	<i>Statistical behavioural regularity</i>	(1) Quasi social norm	(2) Proto social norm	(3) Collective social norm
Behavioural regularity	e.g. food-sharing, grooming, hunting etc.	e.g. generalized tolerance towards infants	e.g. generalized tolerance towards infants	e.g. generalized tolerance towards infants
Bystander reactions upon violation	absent	present (<i>elicited by specific cues</i>)	present (<i>elicited by empathetic competence</i>)	present (<i>elicited by enhanced empathetic & cognitive capacities</i>)
Moral emotion (e.g. indignation)	absent	absent	present (<i>individualistic</i>)	present (<i>individualistic & collective via shared intentionality</i>)
Third-party punishment*	absent	present (<i>via simple rule</i>)	present (<i>via indignation</i>)	present (<i>via indignation</i>)
Social institutions (norm-maintaining)	absent	absent	absent	present (<i>via shared intentionality</i>)